



PIG e:newsletter

Pig Information Group – Autumn 2018 Report

Welcome to the autumn edition of the PIG e:newsletter.

As we enter the time of the year when the nights draw in and the weather gets colder the pig sector as well as the wider agricultural industry now faces a number of challenges and threats over the next few months.

We go to print as there seems to be at long last an agreement on BREXIT although the full details remain unclear. How will agriculture fare when it comes to agreeing new trade terms? This will also have to reconcile with Michael Gove’s new Agricultural Bill that proposes to have Britain’s farmers leading the world in terms of both environmentally sustainable practices and animal welfare. The UK has already higher welfare standards than most other EU countries and this bill will look to push the bar even higher. This contrasts with the fears of an influx of cheaper products from out with the EU and produced to lower standards post-BREXIT.

While the pig price has continued to creep downwards through the summer and autumn, feed costs have continued to rise. Supply of labour is an increasing concern and attracting new entrants at all levels is becoming more vital.

Despite this the pig sector has much to be proud of, productivity continues to increase and the sector continues to become more efficient which gives it a good foundation to face these uncertain times.

Our newsletter has also undergone a small change- each issue will now be slightly shorter than in previous years however we will now be moving from three to four editions a year.

This e-newsletter gives an insight into the work of the Pig Information Group, which comprises representative experts from SRUC’s Research and Education groups and SAC Consultancy who work on various topics relating to pigs. Our primary aim is to enhance communication with those in the pig supply chain.

Universities Innovation Fund, from Scottish Funding Council

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Need an expert?

Contact us using the links on page 6.



Are gastric ulcers painful for pigs?



Sample from a normal stomach



Sample from an ulcerated stomach with areas worst affected circled

Gastric ulcers are a common condition in finisher pigs worldwide. One UK study involving pigs from 60 herds killed at an English abattoir (Swaby and Gregory, 2012) found that four out of every five slaughter pigs had signs of stomach damage with 6% having severe ulcers.

Ulceration occurs around the area where the gullet (oesophagus) enters the stomach. The cause of ulceration is not fully understood and is believed to be multi-factorial. Amongst the potential causes, the physical structure of feed is the most significant risk factor with fine particle size and pelleting significantly increasing the prevalence of ulcers.

Whilst the incidence of ulcers can be high in commercial pigs and the pathology well recognised, there is little information about how ulcers affect welfare. Some pigs with severe ulcers hemorrhage into the stomach and become severely anaemic which can prove fatal. Most pigs with ulcers however are not detected before slaughter and the welfare status of these animals is uncertain. Finding out whether these ulcerated pigs suffer is important because the main risk factor for ulceration - the feeding of pelleted feed with small particle size, is known to improve feed efficiency.

With funding from the Danish Pig Research Centre, SRUC researchers recently conducted a study to investigate the effects of gastric ulceration on the behaviour of finisher pigs. Observations of home pen behaviour were conducted, at two farms (one in Denmark and one in Scotland), in the days immediately prior to slaughter. Stomach condition was assessed post mortem according to a pre-established ulcer scale.

The study found that pigs with ulcers spent significantly more time standing and showed a higher frequency of posture changes. They also tended to spend less time lying on their left side. The posture changes could be interpreted as attempts to avoid liquid stomach contents pooling in the region of the stomach where ulcers occur. This along with the higher level of posture changes may indicate some degree of pain or discomfort associated with the presence of gastric ulcers in pigs. Given the likely welfare issues associated with stomach ulcers, further efforts are needed within the industry to better understand how to prevent ulcers.

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References

Rutherford, K. M. D., Thompson, C. S., Thomson, J. R., Lawrence, A. B., Nielsen, E. O., Busch, M. E., Haugegaard, S. & Sandøe, P. 2018. A study of associations between gastric ulcers and the behaviour of finisher pigs. *Livestock Science* 212, 45-51

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FOCUS TOPIC



African Swine Fever- Is it inevitable?

Twice in the last week, worried pig farmers asked me if it is inevitable that African Swine Fever (ASF) will be brought to UK and is it just a matter of time before that happens?

*My answer was emphatically **No**; but that said, we need co-operation from the UK population in its widest sense to stop it happening.*

The outbreak in Belgium was thought to be due to careless disposal of infected pork-containing food, such that feral pigs were able to consume it and become diseased. This massive westward jump in the occurrence of ASF has sent shock waves through all EU countries and the realisation that unless people are well-informed of the risks associated with careless acts of food disposal, this could happen anywhere, particularly where feral pigs roam free.

So what can we do? Firstly, let's educate people as widely as possible.

Farmers and small holders are well aware of the ban relating to feeding kitchen / food waste to pigs, but how widely do the general public know that it is illegal? It needs to be explained by any means possible that waste food **must** be disposed of in a safe manner.

- People out for picnics and those travelling long journeys and eating on the move must not dispose of food carelessly, or worse still, feed it to pigs as a perceived act of kindness. **They must either take it home or to the next stop-point where it can be placed in very secure bins.**
- Lorry drivers doing long-distance haulage from central or eastern European countries, Russia, Ukraine etc might well buy infected food inadvertently and carry it long distances before disposing of left-overs. Information is getting sent to hauliers to remind drivers of these dangers and their responsibilities.

Closer to home, let's all do what we can to spread the word. Those who keep pigs and those associated with pigs in any way need to think carefully about all the potential biosecurity risks that have been well-publicised. Apart from the obvious risks of imported pork products of all types (fresh, cured, processed), think about clothing, shoes, boots, vehicles if travel has involved going to infected countries. **If in doubt, disinfect everything with Virkon-S at 1:100. This is a must for anyone who has been in the vicinity of pigs or pig farms in another country.**



Image from - UK Wild boar Trust

The populations of feral pigs that currently exist in the UK pose a large risk as the disease is very difficult to contain and eradicate from feral pig populations, as they inhabit wooded areas, have good escape routes and are much faster and able in that terrain than humans. Everyone can help by reporting sightings of feral pigs to maintain up to date information as to their whereabouts. Please submit the following details to:

info@sears.scotland.gov.uk

- **Location, including a description and grid reference if possible**
- **Date**
- **Time**
- **Numbers of adult and young boar seen**
- **Any additional information that may be of use.**

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African Swine Fever- how we can all to our bit to keep it out.



Information on wild boar sightings can be seen at:

https://www.sasa.gov.uk/sites/default/files/Wild_boar_distribution_in_Scotland_0.pdf

SASA have also produced a map based on these sightings which has been reproduced below:

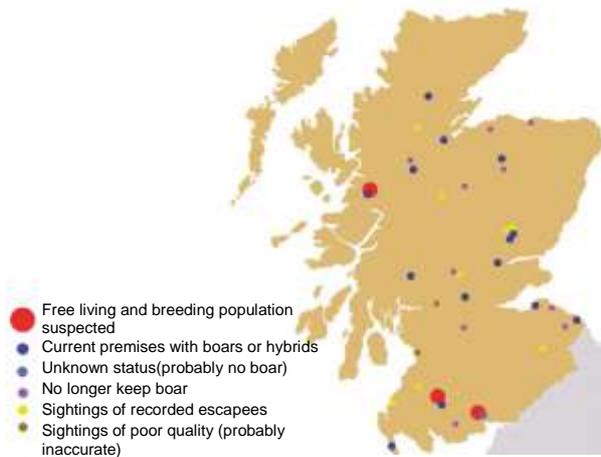


Image 2. Current and past locations of captive wild boar and sightings/records outside of captivity (SASA)

Lastly, how good is your perimeter fence? If foxes and badgers can get in, so can feral pigs. It is worth spending what you can on getting a secure fence and gates installed and importantly, checking fencing regularly to keep it secure.

Finally, let's have a 'call to arms' to protect our pigs and our most valuable industry – the disease is not inevitable if we all take the right actions.

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AFRICAN SWINE FEVER- the facts

African Swine Fever is a notifiable disease.

African Swine Fever Virus (ASFV) is the causative agent of **African Swine Fever (ASF)** and causes a lethal haemorrhagic fever in domestic pigs. Endemic to sub-Saharan Africa (ASFV) exists in the wild through a cycle of infection between ticks and wild pigs with no disease signs in these species. One fear regarding the outbreak in China is that as the disease spreads it enters the tick population to the south of the country effectively creating a never ending cycle of infection.

What are the clinical signs?

- fever
- loss of appetite
- lack of energy
- sudden death

Other signs can include:

- vomiting
- diarrhoea
- red or darkened skin, particularly on the ears and snout
- discharges from eyes and nose
- laboured breathing and coughing
- abortions
- weakness
- unsteady gait

An animation has been produced by the European Food Standards Authority to provide more information to pig producers

<https://www.youtube.com/watch?v=eyQ4t1wHI2M>

Photos of infected pigs have been uploaded to help pig producers by DEFRA and can be found below.

www.flickr.com/photos/defragovuk/sets/72157694954571532/



What do the new APHA pig welfare inspections mean for producers?

From January 2019 changes to Animal Plant Health Agency (APHA) pig welfare inspections will focus on:

- **Provision of sufficient appropriate environmental enrichment**
- **Reduction in use of routine tail docking**

Requirements are based on the following legislation (please click links)

- [Animal Health and Welfare \(Scotland\) Act 2006](#)
- [The Welfare of Farm Animals \(Scotland\) Regulations 2010](#)
- [Commission Recommendation EU 2016/336](#)

While these legislative requirements have been in place for some years, the new inspection regime is APHA's response to EU pressure on compliance. Inspections assessing whether pigs essential behavioural needs were being met without compromise to health will categorise enrichment material based on the following characteristics:

"MICE" Manipulable; pigs can alter the location, appearance or structure of materials, Investigable; materials encourage investigation e.g. rooting with the snout, Chewable, Edible; can be eaten or smelt and preferably of nutritional benefit

"SASH": Of Sustained interest; encouraging exploratory behaviour and being regularly replaced, Accessible for oral manipulation, Sufficient in quantity, Hygienic and clean

Category	Characteristics	Inspection code
Optimal materials	Meets MICE and SASH characteristics and can be used alone	"Ideal"
Suboptimal materials	Materials possessing most of the characteristics listed and therefore should be used in combination with other materials	"Acceptable"
Materials of marginal interest	Providing distraction but not considered as fulfilling pigs essential needs	"Unacceptable" - if used alone

Inspectors will look at standing and sitting pigs interactions with enrichment materials compared to those interacting with other pigs, pen fittings/ floors or

muck and calculate an enrichment score from A to D.

Score	Characteristics of enrichment provided
A	Using "ideal" material (e.g. straw) <u>Or</u> using "acceptable" material in combination so enrichment meets MICE and SASH criteria
B	Minor issues with above
C	No enrichment <u>or</u> limited combination of acceptable materials is being used e.g. chain or ball only <u>or</u> unsafe material being used
D	As C, and at least one animal has suffered unnecessarily as a result

Scores of C and D would be considered non-compliant with likely reductions in Single Farm Payment of 3% and 5% respectively.

Inspections will also look at the routine use of tail docking. This is in accordance with the following:

[The Prohibited Procedures on Protected Animals \(Exemptions\) \(Scotland\) Regulations 2010](#)

Producers will need to demonstrate at inspections that tail docking has been undertaken as a last resort. Inspectors will look at signs within the pigs of sub-optimal environments and will assess a number of environmental parameters including **temperature, CO₂ and NH₃ levels, relative humidity, light, noise and stocking densities.**

While the code is still a draft, measures producers can take include keeping records showing steps had been taken to prevent tail biting, ensuring enrichment meets required standards and environments are within limits. It is also suggested that producers work with their vets to produce an action plan.

Further Information and Resources are available below:

ADHB – *Practical Guide to Enrichment*:
<https://pork.ahdb.org.uk/media/273607/enrichment-guide-2017.pdf>

AHDB- *Tail Biting Web Based Husbandry Advisory Tool*
<https://webhat.ahdb.org.uk/>

Commission Staff Working Document:
https://ec.europa.eu/food/sites/food/files/animals/docs/a_w_practice_farm_pigs_stfwrkdoc_en.pdf

Welfare Code Pigs (draft):
<https://consult.defra.gov.uk/>

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The PIG e:newsletter was produced by the Pig Strategy Group at SRUC through funding from the Universities Innovation Fund, from Scottish Funding Council. Should you wish to know more about any of the articles featured or wish to find out more about SRUC pig related activities please contact the following or click on the links below.

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Not in picture: Kevin Rudland, Calum Johnston, Hannah Orr